

IN THE UNITED STATES PATENT & TRADEMARKS OFFICE

PART UNIT: 1745  
APPLICANT: Chien-Min Sung  
SERIAL NO.: 10/627,442  
FILED: 7/25/03  
CONFRM. NO.: 3424  
FOR: NANODIAMOND PCD AND  
METHODS OF FORMING  
ATTORNEY DOCKET NO. 22001

**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER  
37 C.F.R. § 1.97**

**CERTIFICATE OF MAILING  
UNDER 37 C.F.R. § 1.8**

DATE OF DEPOSIT: 12/23/03

I hereby certify that this paper or fee (along with any paper or fee referred to as being attached or enclosed) is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Emily Mechem*  
Emily Mechem

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). Applicant respectfully submits that this Information Disclosure Statement is filed pursuant to:

☒ 37 C.F.R. § 1.97 (b)(1) or (3), within three months of the filing date of the application, or before a first office action on the merits, whichever occurs last;

☐ 37 C.F.R. § 1.97 (c), after a first office action on the merits, but before a Final Office Action or a Notice of Allowance, whichever occurs first, and is accompanied by either 1) a statement in accordance with 37 C.F.R. § 1.97(e), or 2) the fee set forth in § 1.17(p); or

☐ 37 C.F.R. § 1.97 (d), after a Final Office Action or Notice of Allowance, whichever occurs first, but on or before payment of the issue fee, and is accompanied by both 1) a statement in accordance with 37 C.F.R. § 1.97(e), and 2) the fee set forth in § 1.17(p).

While no representation is made that any of these references may be "prior art" within the meaning of that term in accordance with 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record believes that the references listed, together with any other references which may have been previously submitted or listed, are the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each listed reference (or relevant portion thereof) which was not previously submitted to, or cited by, the Patent Office is also enclosed.

For all listed references that are not either in the English language, or accompanied by a translation into English, a concise explanation of relevance as required under 37 C.F.R. § 1.98(a)(3) is enclosed attached to each.

Please charge any additional fees or credit any overpayment to Deposit Account No. 20-0100.

Dated this 28<sup>th</sup> day of December, 2003.

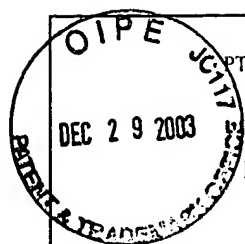
Respectfully submitted,



M. Wayne Western  
Attorney for Applicant  
Registration No. 22,788

THORPE NORTH & WESTERN, LLP  
Customer No. 20,551  
P.O. Box 1219  
Sandy, Utah 84091-1219  
Telephone: (801) 566-6633

  
MWW/DWO/ESE/em



PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
22001SERIAL NO.  
10/627,442

## LIST OF PRIOR ART CITED BY APPLICANT

APPLICANT Chien-Min Sung

FILING DATE  
7/25/03

GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	3,399,254	08/27/1968	B.W. Dunnington			
	A2						
	A3						
	A4						
	A5						
	A6						
	A7						
	A8						
	A9						
	A10						
	A11						
	A12						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	A13						
	A14						
	A15						
	A16						

## OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)

	A17	Horton, M. D., B. J. Pope and H. T. Hall, "Sintered Diamond," INTERNATIONAL INDUSTRIAL DIAMOND ASSOCIATION SYMPOSIUM, WASHINGTON, D. C. (1974).
	A18	Pope, B. J., M. D. Horton, H. T. Hall, L. S. Bowman and H. Adaniya, "Sintered Diamond: Its Possible Use as a High Thermal Conductivity Semiconduction Device Substrate," PROC. 4TH INTERNATIONAL CONFERENCE ON HIGH PRESSURE (AIRAPT), Kyoto, Japan (1974).
	A19	Hall, H. Tracy, "Sintered Diamonds," SCIENCE, Vol 169, August 28, 1970.
EXAMINER		DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.



**THORPE**  
**NORTH &**  
**WESTERN** L.L.P.  
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AND RELATED MATTERS

**SALT LAKE AREA OFFICE**  
8180 SOUTH 700 EAST, SUITE 200  
SANDY, UTAH 84070-0562  
801.566.6633  
801.566.0750 FAX  
PATLAW@TNW.COM  
WWW.TNW.COM

**U.S. MAILING ADDRESS**  
P.O. Box 1219  
SANDY, UTAH 84091-1219

**LAS VEGAS AREA OFFICE**  
OF COUNSEL: NEIL J. BELLER †  
7408 WEST SAHARA  
LAS VEGAS, NEVADA 89117  
702.368.7767  
† ADMITTED IN NEVADA

VAUGHN W. NORTH  
M. WAYNE WESTERN  
GARRON M. HOBSON  
PETER M. DE JONGE  
CLIFTON W. THOMPSON  
STEVE M. PERRY  
WEILI CHENG, PH.D.  
DAVID R. MCKINNEY, PE.  
GARY P. OAKESON  
DAVID W. OSBORNE  
DAVID L. STOTT  
JASON R. JONES  
PAUL C. OESTREICH, M.S.  
ERIK S. ERICKSEN, M.S.  
REGISTERED PATENT ATTORNEYS

NATHAN S. WINESETT  
OF COUNSEL

BRYAN K. HANKS  
PATENT AGENT

ALEX HAYMOND, B.S. EE  
TODD B. ALDER, PH.D.  
JONATHAN M. BENNS, PH.D.  
AARON M. SMITH, B.S. EE  
WILLIAM T. RALSTON, PH.D. EE  
TECHNICAL CONSULTANTS

CALVIN E. THORPE  
(938-1999)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**TRANSMITTAL OF SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Patent Application No. 10/627,442, Filed 7/25/03  
Inventor(s): Chien-Min Sung  
**NANODIAMOND PCD AND METHODS OF FORMING**  
Confirmation No.: 3424  
Group Art Unit: 1745  
Attorney Docket No. 22001

Dear Sir/Madam:

Transmitted herewith for filing and pursuant to 37 C.F.R. §§ 1.56 and 1.97 is a Supplemental Information Disclosure Statement.

Enclosed also are the following designated documents, as required under 37 C.F.R. §§ 1.97 and 1.98:

- ☒ Form PTO-1449 list of 4 reference(s) submitted for consideration.
- ☒ Legible copies of the listed references or their relevant portions.
- ☐ All English translations of each non-English reference, if any, within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) (see 37 C.F.R. § 1.98(c)).

The following are included within the Information Disclosure Statement if applicable and as required under 37 C.F.R. § 1.98:

- ☐ Concise explanation of relevance of each reference not in English and unaccompanied by an English translation.
- ☐ Statement that certain listed references not enclosed are substantially cumulative of an enclosed reference.
- ☐ Statement that certain listed references not enclosed were previously cited by or submitted to the Office in the identified prior application which is relied upon for an earlier filing date under 35 U.S.C. § 120.

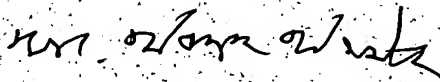
In order to secure consideration of the items designated above, one or more of the following, if required, is also enclosed:

- ☐ Statement under 37 C.F.R. § 1.97(e)(1) or (2).
- ☐ Check No. \_\_\_\_\_ in the amount of \$180.00 (amount in § 1.17(p)) constituting the submission fee set forth in 37 C.F.R. § 1.17(p).

In the event that 37 C.F.R. § 1.97(c) applies and the Examiner is not satisfied that the Statement meets the requirements of 37 C.F.R. § 1.97(e), or in any other event remediable by a fee, please credit any over payment or charge any additional fees to Deposit Account No. 20-0100 of the undersigned.


Dated this 23<sup>rd</sup> day of December, 2003.

Respectfully submitted,



M. Wayne Western  
Attorney for Applicant  
Registration No. 22,788

THORPE NORTH & WESTERN, LLP  
Customer No. 20,551  
P.O. Box 1219  
Sandy, Utah 84091-1219  
Telephone: (801) 566-6633

  
MWW/DWO/ESE/em  
Enclosures